

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION

RONALD W. COOKE,	§	
	§	
<i>Plaintiff,</i>	§	
	§	
vs.	§	CIVIL ACTION NO. H-04-3921
	§	
COBB INTERNATIONAL, INC. D/B/A	§	
ROTORWAY INTERNATIONAL,	§	
	§	
<i>Defendant.</i>	§	

**OPINION ON SUMMARY JUDGMENT**

In this case arising out of a helicopter crash, plaintiff Ronald W. Cooke has filed a motion for summary judgment on liability (Dkt. 22) and defendant RotorWay International has filed a motion for summary judgment based on plaintiff's failure to meet his burden of proof (Dkt. 24). Having considered the parties' submissions, all matters of record, and applicable law, the court concludes that both motions should be denied.

**I. BACKGROUND FACTS**

The following facts are undisputed. Plaintiff Ronald Cooke is a former Naval aviator with a masters degree in aeronautical engineering and extensive flight experience. Cooke bought a helicopter kit from RotorWay in 1983. Cooke built the helicopter himself and it was licensed for operation in 1985. Between 1985 and 2000 he logged only about 100 hours of flight time. In 2000, Cooke decided to upgrade the helicopter engine from a single ignition to a dual ignition system. Because Cooke decided RotorWay's estimate for performing the upgrade was too expensive, Cooke purchased the parts to perform the

upgrade himself. Cooke purchased new cylinder heads and valve train parts and sent them to a local mechanic for assembly. Cooke then attached the assembled heads on the block of the helicopter engine, following RotorWay's sequence and torque instructions for tightening the bolts, and set the clearances between the rocker arms and the caps at the end of the valve. After approximately 25 hours flight time, the engine malfunctioned. Cooke sent the heads (with the valve train parts) to RotorWay for servicing. RotorWay returned the heads to Cooke, who tested them for compression. The repaired heads failed compression tests and Cooke sent them back to RotorWay for further servicing. RotorWay sold Cooke additional valve train parts, including new lash caps, washers and seals, which RotorWay assembled in the heads. There is no evidence RotorWay sold Cooke new valve spring retainers. RotorWay returned the heads to Cooke with the springs and retainers assembled in the heads, but Cooke attached the lash caps and the rocker arms. Cooke tested the heads for compression, bolted the heads to the engine block, and set the valve lash clearances. During test flights after this repair, Cooke noticed vibration. Cooke balanced the rotors, and observed that the helicopter gauges were registering low oil pressure. Cooke purchased and installed a new oil gauge. After flying the helicopter an additional 2 hours, the engine failed in flight and the helicopter crashed in Lake Conroe, Texas.

The issue in this case is what caused the engine to fail. Because the cylinder heads and valve train parts were serviced and assembled by RotorWay prior to the accident, Cooke argues that RotorWay's negligence caused the accident under a theory of *res ipsa loquitur*.

RotorWay contends that Cooke has no evidence that RotorWay's negligence caused the engine failure. Both parties rely on expert testimony to support their positions.

## **II. SUMMARY JUDGMENT STANDARDS**

Summary judgment is appropriate if no genuine issues of material fact exist, and the moving party is entitled to judgment as a matter of law. FED. R. CIV. P. 56(c). The party moving for summary judgment has the initial burden to prove there are no genuine issues of material fact for trial. *Provident Life & Accident Ins. Co. v. Goel*, 274 F.3d 984, 991 (5th Cir. 2001). Dispute about a material fact is "genuine" if the evidence could lead a reasonable jury to find for the nonmoving party. *In re Segerstrom*, 247 F.3d 218, 223 (5th Cir. 2001). "An issue is material if its resolution could affect the outcome of the action." *Terrebonne Parish Sch. Bd. v. Columbia Gulf Transmission Co.*, 290 F.3d 303, 310 (5th Cir. 2002).

If the movant meets this burden, "the nonmovant must go beyond the pleadings and designate specific facts showing that there is a genuine issue for trial." *Littlefield v. Forney Indep. Sch. Dist.*, 268 F.3d 275, 282 (5th Cir. 2001) (quoting *Tubacex, Inc. v. M/V Risan*, 45 F.3d 951, 954 (5th Cir. 1995)); *Caboni v. Gen. Motors Corp.*, 278 F.3d 448, 451 (5th Cir. 2002). If the evidence presented to rebut the summary judgment is not significantly probative, summary judgment should be granted. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249-50 (1986). In determining whether a genuine issue of material fact exists, the court views the evidence and draws inferences in the light most favorable to the nonmoving party. *Id.* at 255; *Hotard v. State Farm Fire & Cas. Co.*, 286 F.3d 814, 817 (5th Cir. 2002).

### III. ANALYSIS

The doctrine of *res ipsa loquitur* permits an inference of negligence where the evidence establishes that (1) the particular thing that caused the injury was under the management of the defendant; and (2) the accident is such that in the ordinary course of things does not happen if those who have management of the thing exercise proper care. *United States v. Johnson*, 288 F.2d 40, 42 (5th Cir. 1961).

The evidence is undisputed in this case that RotorWay sent the cylinder heads, with valve train parts, to Cooke and Cooke installed them in the helicopter engine. Cooke was flying the helicopter when it crashed. Thus, the first element of *res ipsa loquitur* is not met in this case. Moreover, where the plaintiff relies on an inference of negligence pursuant to *res ipsa loquitur*, the evidence must exclude alternative causes of the accident at issue. *See Michaels v. Avitech, Inc.*, 202 F.3d 746, 753-54 (5th Cir. 2000). Cooke has not met this burden.

Cooke contends that the accident was caused by the insufficiency of the clearances between the rocker arms and valve spring retainers. This contention is based on an examination of the engine shortly after the accident by a mechanic, Bud Warren. Warren testified that the clearances were improper because RotorWay either supplied the wrong valve spring retainers<sup>1</sup> or ground the valves too deep. He could not say for certain which root cause was at fault, although he “leans” toward the retainers because he assembled the heads

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<sup>1</sup> The parties use the terms “valve spring retainers” and “retainer clips” interchangeably.

using new RotorWay retainers and the clearance was not a problem. Warren further testified that Cooke could have seen that the clearances were off after he attached the rocker arms, but because he was not a professional mechanic he did not recognize the problem.

In contrast, RotorWay's expert, Warren Wandel, observed during his inspection of the engine that the valve lash clearances on two cylinders were incorrect, and that all eight of the valve retainers exhibited damage from the rocker arms making contact with the retainers. Wandel further observed that the amount of damage to the retainers indicates that the clearances on all of the valves were incorrect and that the engine had not operated for a substantial period with the incorrect clearances. Wandel concluded that "the most probable cause of this accident was the helicopter owner's failure to properly set and subsequently inspect and confirm the valve lash clearances in accordance with the applicable maintenance manual instructions."

In sum, Warren contends that the clearance between the rocker arms and valve spring retainers was the problem, while Wandel contends that the clearance between the rocker arms and the valve lashes was the problem. There is no dispute that Cooke set the latter clearances after he bolted the cylinder heads to the engine. Cooke testified that he properly set the valve lash clearances to .008 as directed by the RotorWay manual, but Wandel's inspection showed excessive clearances.<sup>2</sup>

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<sup>2</sup> Cooke argues that the court should reject Wandel's conclusion because Wandel's own inspection showed that there was no damage to the lash caps and because Warren testified that an excessive valve lash clearance did not cause the accident. These are points for cross  
(continued...)

Moreover, while there is no dispute that the valve spring retainers were assembled in the cylinder heads at the time Cooke received them from RotorWay, Cooke installed the rocker arms himself. Warren testified that Cooke could have observed the actual rocker arm to valve spring retainer clearance after installing the cylinder heads on the engine.<sup>3</sup> Clearly, the evidence establishes factual disputes that preclude summary judgment for either party in this case.

#### IV. CONCLUSION

Plaintiff is not entitled to summary judgment based on an inference of negligence under the theory of *res ipsa loquitur*. There are genuine factual disputes as to the cause of the helicopter accident. Therefore, the plaintiff's motion for summary judgment (Dkt. 22) and defendant's motion for summary judgment (Dkt. 24) are denied. The scheduling order issued in this case (Dkt. 30) remains in effect.

Signed at Houston, Texas on April 3, 2006.

  
Stephen Wm Smith  
United States Magistrate Judge

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<sup>2</sup> (...continued)  
examination and argument that will go to the weight the jury should afford the testimony. The court notes that Wendel has not been examined on these points because Cooke declined to take his deposition. Cooke has not moved to strike Wendel's testimony and the deadline for doing so has passed.

<sup>3</sup> Cooke contends that RotorWay never sent him the proper instructions to enable him to do so.